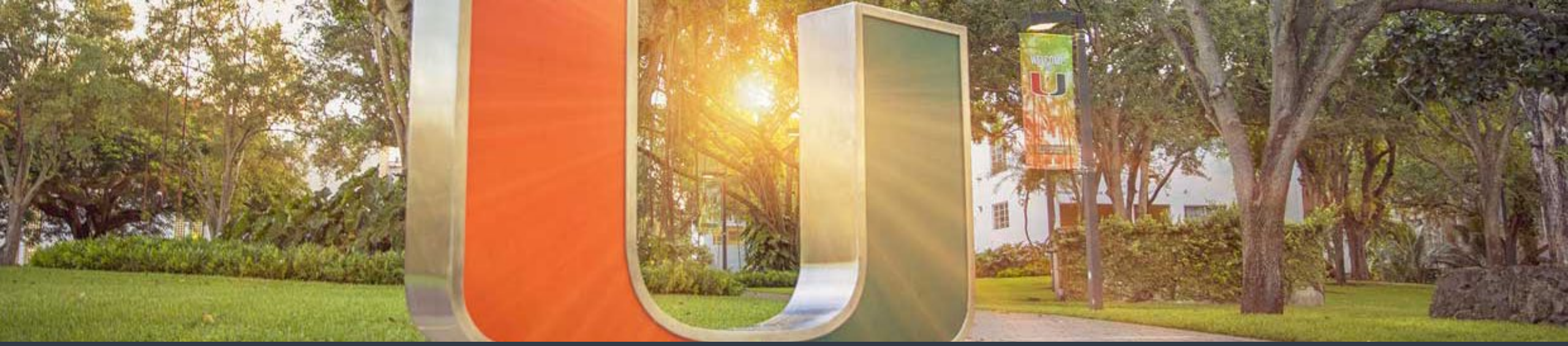

AFTER THE FACT PERMITTING:

OLD PROBLEMS, NEW HEADACHES

Brian Cumbie, CHMM

July 2025

UNIVERSITY OF MIAMI

Introduction to the University of Miami

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BRIAN CUMBIE, CHMM

Hazmat and Environmental Protection Safety Manager

Background:

- **2+ years at the University of Miami as Hazmat and Environmental Protection Manager.**
- **7 years at the Florida Department of Environmental Protection.**
  - Lab Tech
  - Compliance Inspector
  - Emergency Responder
  - Branch Manager

University of Miami

- University and Health System
- 20,000 employees
- >5,000 through the Academy
- More than 19,000 students
- 3 campuses and 1 remote campus
- Just celebrated its centennial
- EHS established for about 25 years

AGENDA OVERVIEW

- Identification of Unpermitted Projects
- Resolving After the Fact Permitting
- Interesting Projects
- Lessons learned

Identification of "Un" permitted Projects

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HOW DID WE MISS IT?

Identification of "Un"permitted Projects

Lack of Cohesion Between Project Management and Environmental

- Minimal or non-existent relationship between Project Management and Environmental.
- A lack of understanding of the environmental permitting needs by project management.
- EHS not consulted during the project.

As-builts Were Not Provided When Things Change

- Due to changes in project needs or availability of equipment, things rarely are the same throughout the entire project.
- Sometimes updated plans are not resubmitted after receiving approvals.
- Hesitancy to submit any reworks during Temporary Certificate of Occupancy process.

Portions of Project Are Missed During Permit Review

- If certain key information is not provided during the initial permitting review, whole portions of the project can be missed by the applicable permitting groups or incorrectly permitted.

Staff Turnover

FROST CHEMISTRY STORAGE TANK

Identification of “Un”permitted Projects

Routine Inspection Findings

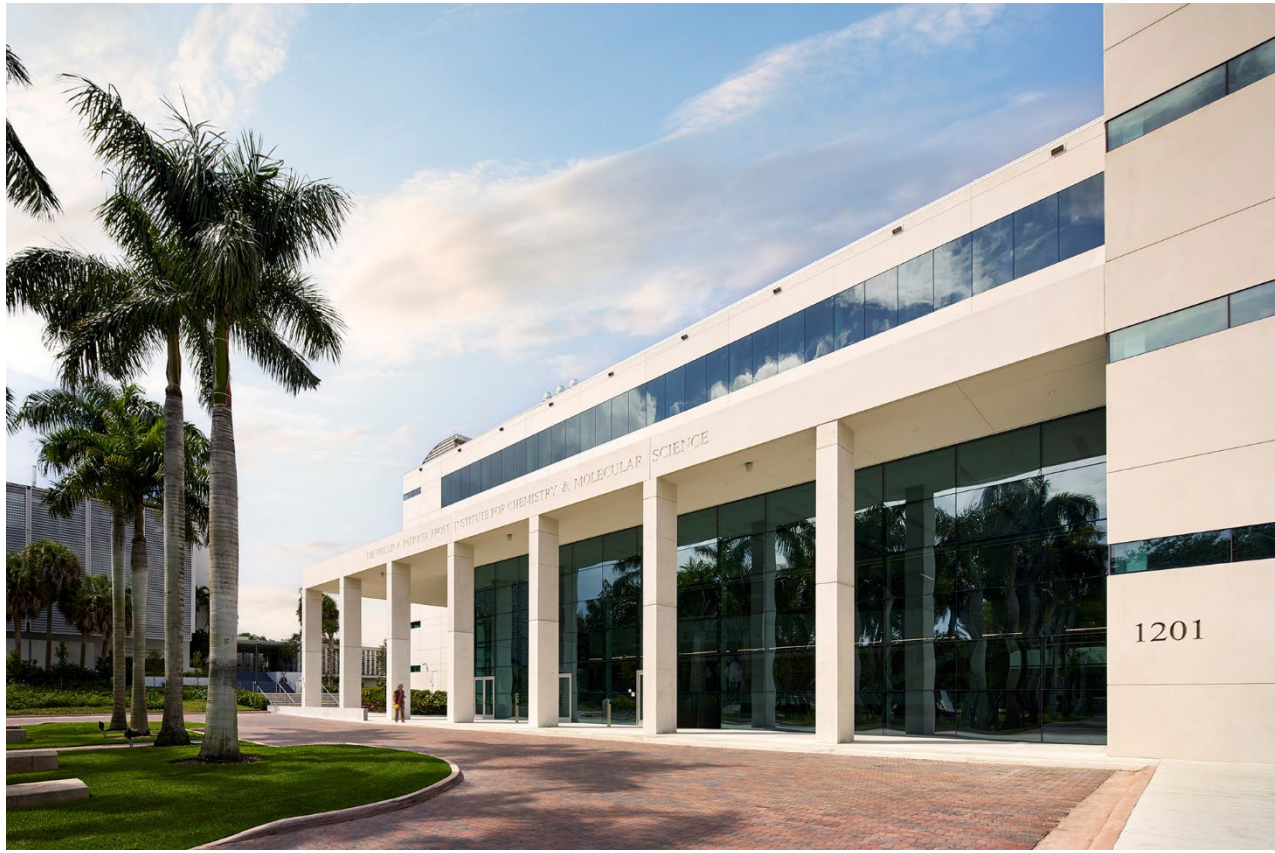
The FICMS storage tank was evaluated during a routine compliance inspection, revealing no installation inspection and inoperable sensors.

Incorrect Capacity on Plans

Approved plans called for a 3,000-gallon tank, but the tank on site has a capacity of 1,749 gallons.

Failed Sensor Tests

Overfill and Leak Detection sensors for the storage tank failed during operability testing requiring repair and retesting.



CORAL GABLES CAMPUS GENERAL AIR PERMIT

Identification of "Un"permitted Projects

Air Permit Review

– The active permit had 29 generators listed

– A generator list provided by facilities showed 32 active generators

– 6 generators had been added and 3 had been removed since the last permit revision.

– A few generators had also been replaced.

County Inspection:

– The County performed its first routine air inspection since Covid.

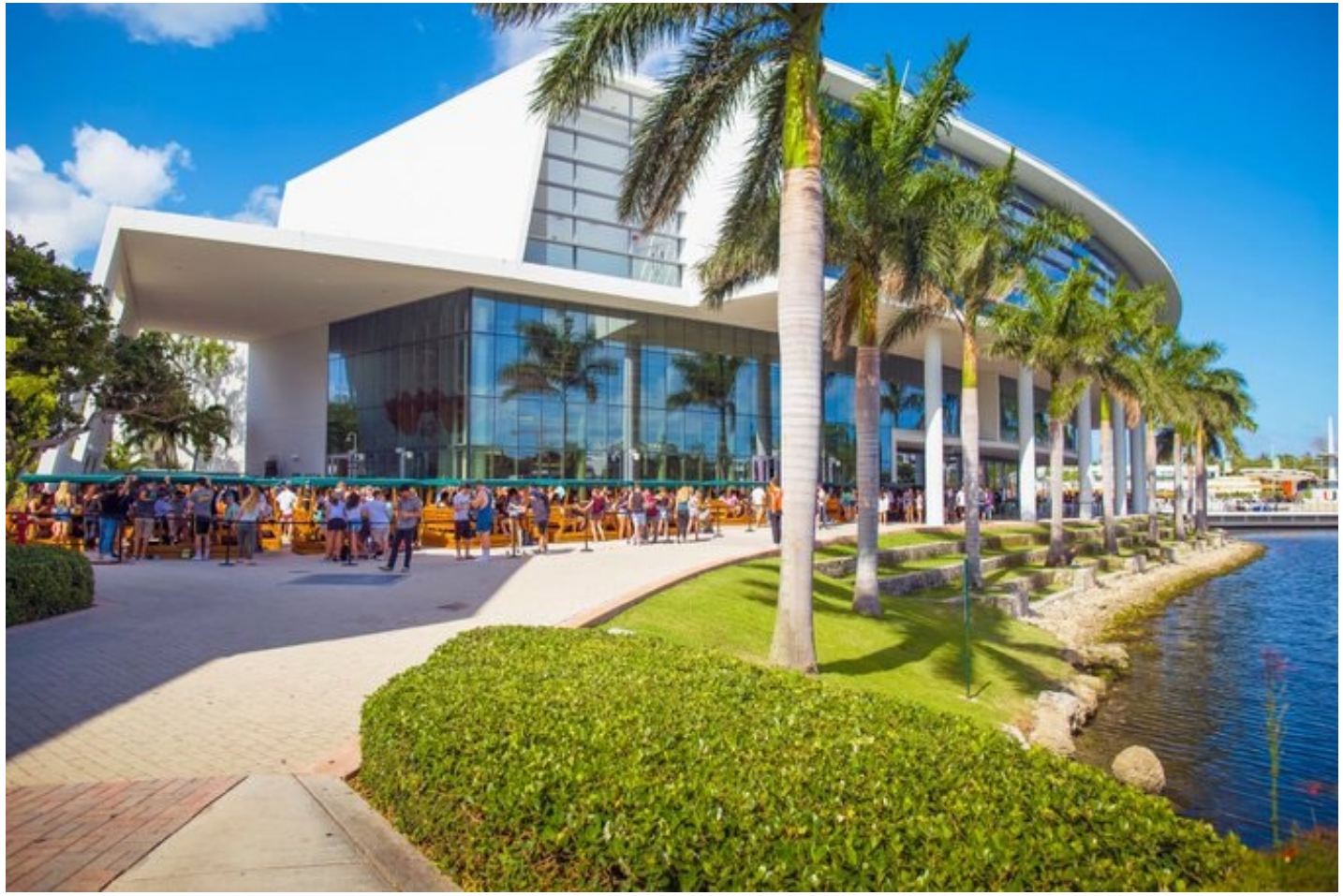
– The inspector worked with us since I had a list of current generators that we were working on updating.

RATHSKELLER FATS, OILS, GREASE (FOG) PERMIT

Identification of “Un”permitted Projects

Active Enforcement Action From the County

- First identified when we were renewing FOG permits.
- A sewer force-main had not been certified prior to being tied in, which led to an enforcement action by the County in 2021 which identified that the Rathskeller restaurant did not have an approved FOG system.
- Previous attempt to get the permit failed because the sewer extension certification was not completed yet.



After the Fact Permitting

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FICMS RESOLUTION

After the Fact Permitting

Collaboration with Project Management

- We had to collaborate to make sure we can obtain the needed information to resolve open citations.

Required Testing

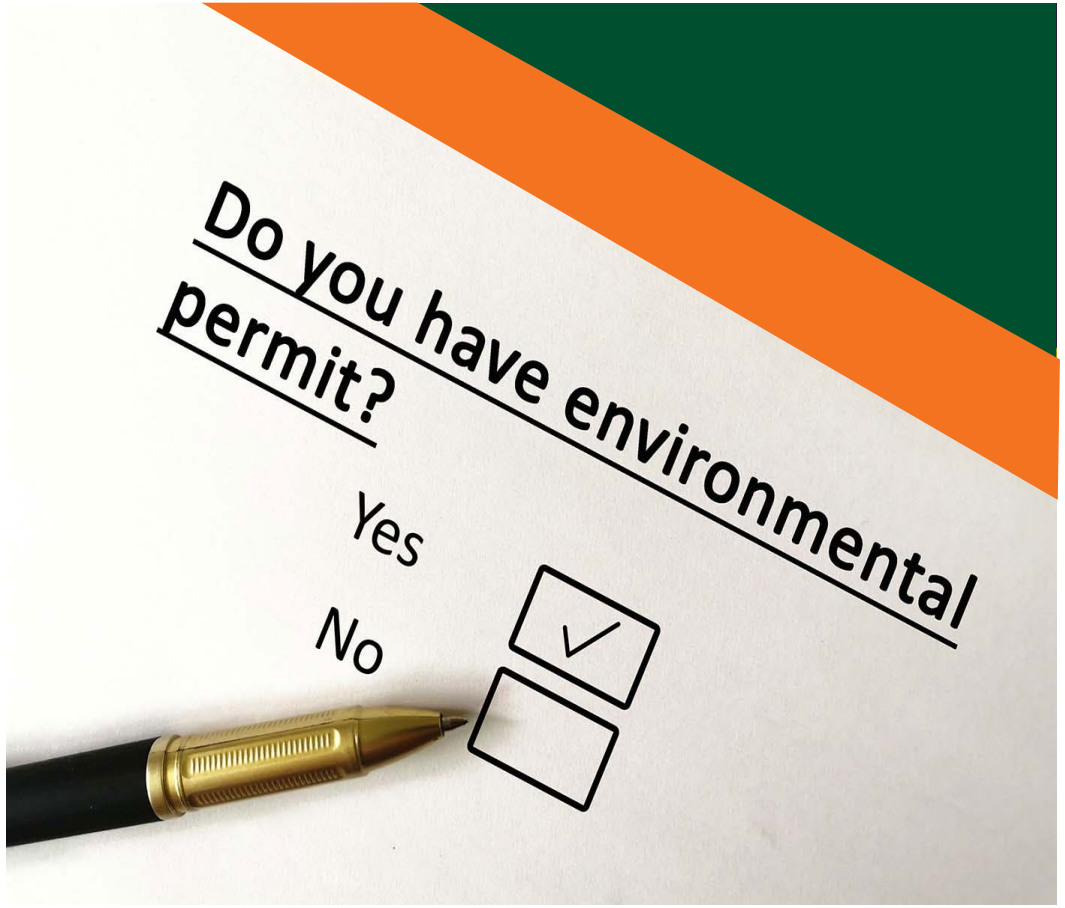
- I had to work with one of our vendors to do the required installation testing, which includes:
  - Integrity Test of the Interstice and Fill Bucket
  - Operability Testing of the Release Detection and Overfill Protection Devices.

Engineered Drawings

- Project management had to work with a vendor to obtain the updated drawings and then our permit expediter to submit the plans for review.

CORAL GABLES AIR PERMIT RESOLUTION

After the Fact Permitting

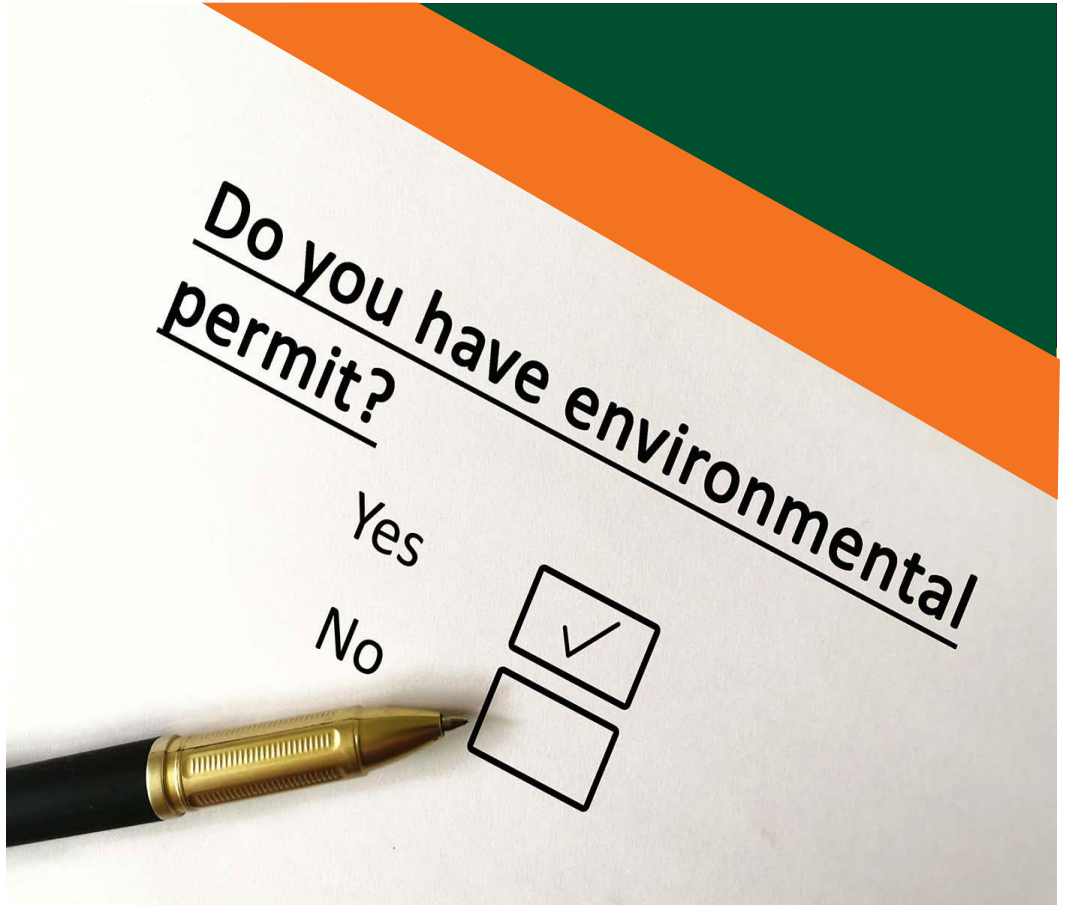


Meeting with Permitting Group

- Conducted a meeting with the permitting group to discuss our permit to understand how we got so behind.
- Identified that there permitting group was seeing each individual generator as a not needing a permit.
- No one at the University was specifying that these generators needed to be added to the campus-wide permit.

CORAL GABLES AIR PERMIT RESOLUTION

After the Fact Permitting



Document Reviews

- The Air Permitting group was willing to work with us to perform a complete permit update.
- The Permitting group required specifications such as size and fuel usage for each generator.

Research and Requests

- Had to first verify that the information provided to us by our facilities team was completely accurate.
- I then worked with our project management team to gather spec sheets from newer projects.
- Internet search for spec sheets and any other information for our oldest generators.

RATHSKELLER FOG PERMIT RESOLUTION

After the Fact Permitting

Coordination with our Facilities Wastewater Manager

I had to work with the University's Wastewater Team to understand the history of the non-compliance issue.

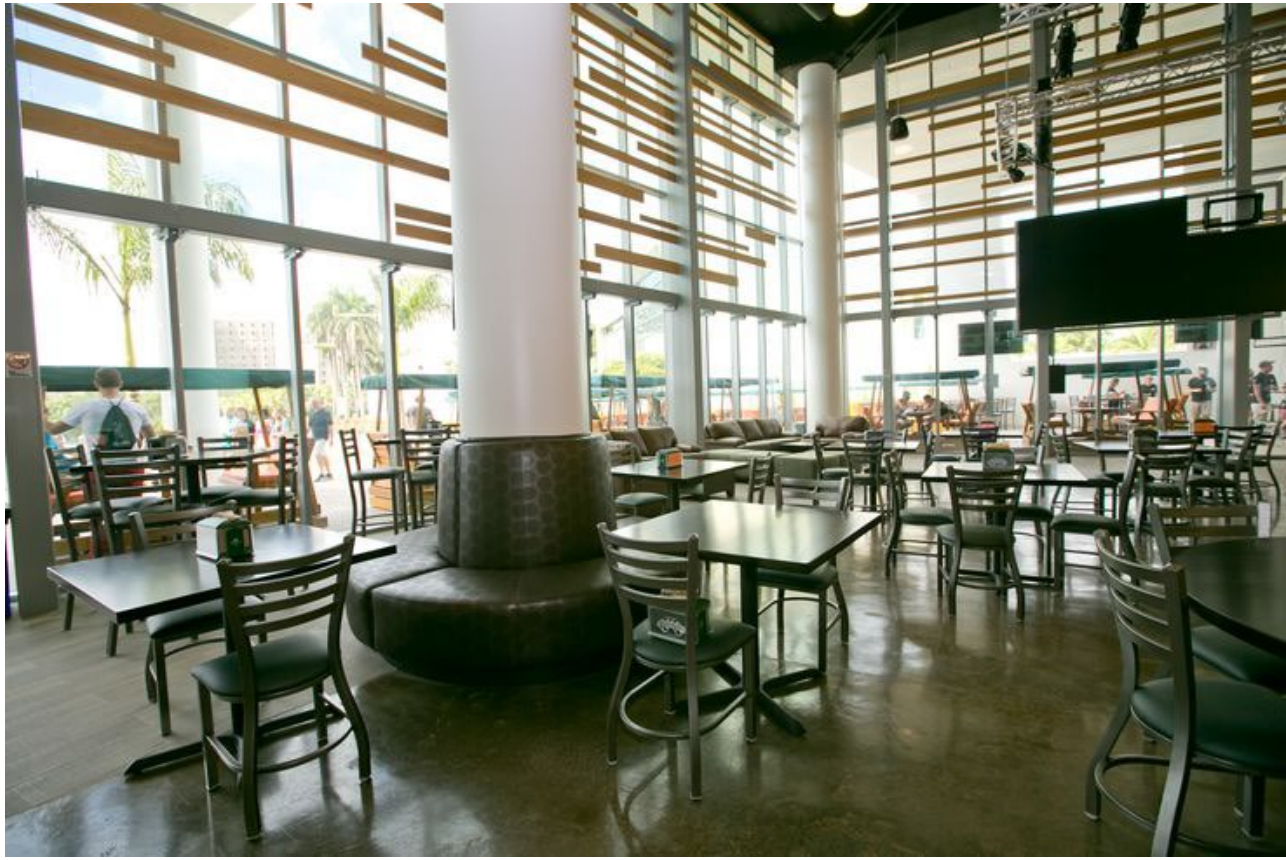
Worked together to hire vendors to perform necessary assessments and provide engineer drawings.

Condition Assessment

A recent condition assessment is needed anytime permit changes must be performed on FOG systems.

Updated Engineered Drawings

The University had provided drawings to the County in 2019 with load calculations but never completed the permitting process.



Interesting Projects

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CSTARS TANK

Interesting Projects

No Previous Inspection History

- 2,100 gallon tank was installed and permitted in 2003.
- Due to an error, the tank was misidentified as an unregulated tank until 2021.
- Finally had it's first inspection in 2025.

Failed Testing and Inspection

- Integrity test of the interstice, and operability testing of the sensors all failed.
- Electronic sensors were never properly connected and new sensors cannot be added to generator.
  - > Manual gauges were installed to satisfy the overfill and leak detection requirements.
- Retesting of the Interstice

INDOOR PRACTICE FIELD TANK

Interesting Projects

Inconsistencies with Volume

- Registered with the State as 1000-gallon tank.
- Plans submitted showed a 550-gallon tank (nonregulated).
- Actual Capacity is 633-gallons.
- **Recent trend in engineered drawings showing "usable gallons", not actual capacity.**

Installation Testing

- I worked with our vendor to obtain all the needed installation testing for the tank.

Engineered Drawings

- Project Management hired an Engineer to provide new plans, and found an issue.
- After discussions with project management and an engineer, it was identified that the pad doesn't meet code compliance for the actual capacity of the tank.
- Current options are to either:
  - Repour the pad to meet code.
  - Downsize the tank to meet current pad's rating.

Lessons Learned

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LESSONS LEARNED

Proactive Environmental Compliance

- Review your regulated systems and try to find problems before an inspector does.
- Frequently walk your campus to see if any of your regulated systems have changed.
- Working with project management during project design to identify issues and help with environmental permitting.
- Remember that after the fact permitting often costs more than doing it right the first time.
- Facilities sometimes makes changes without project management
- EHS taking the lead in environmental permitting and other essential operating permits such as CU's and BTR's

Environmental Permitting

Thank

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